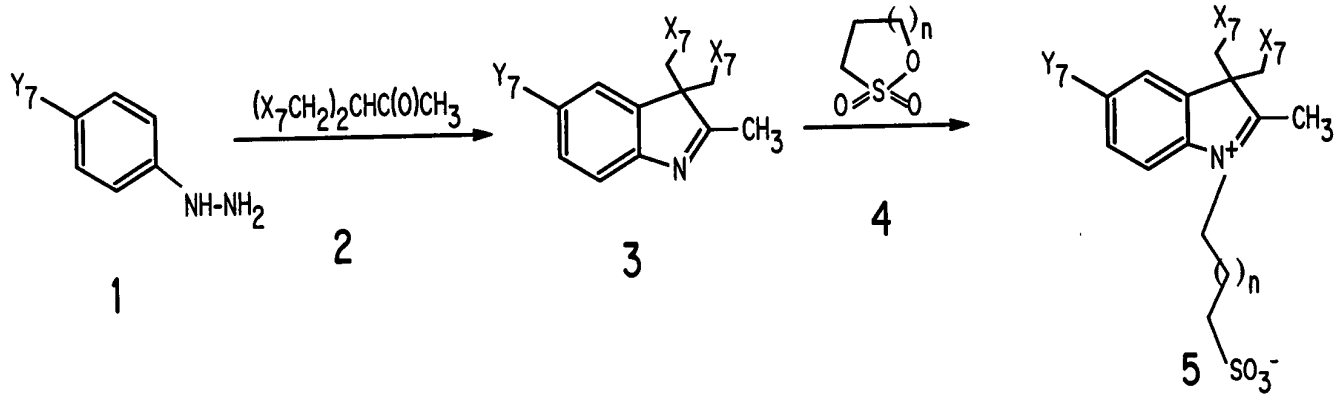


FIG. 1 : n = 1-3; X_7 = H, OH; Y_7 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH

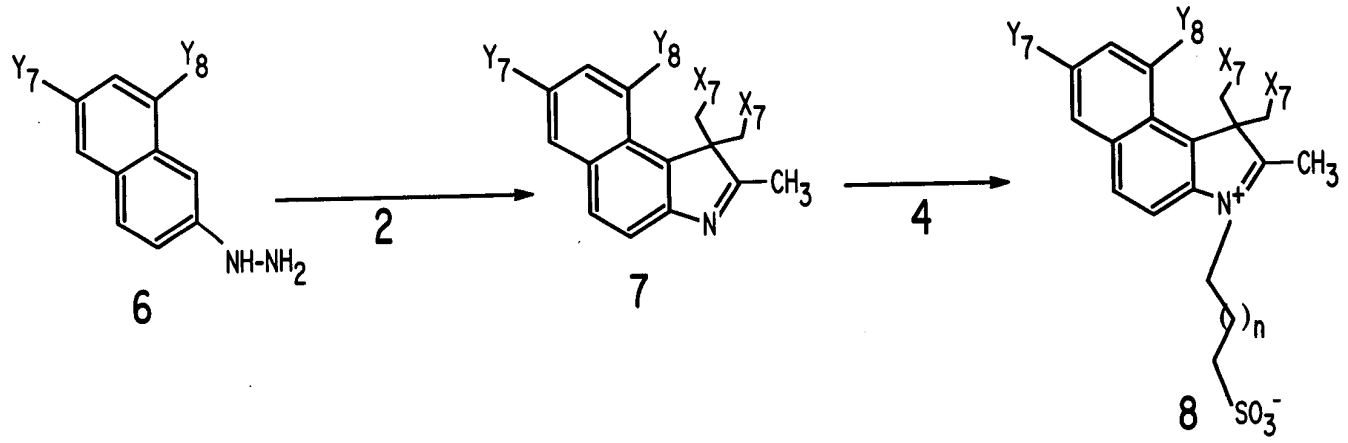


FIG. 2 : n = 1-3; X_7 = H, OH; Y_7,Y_8 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH

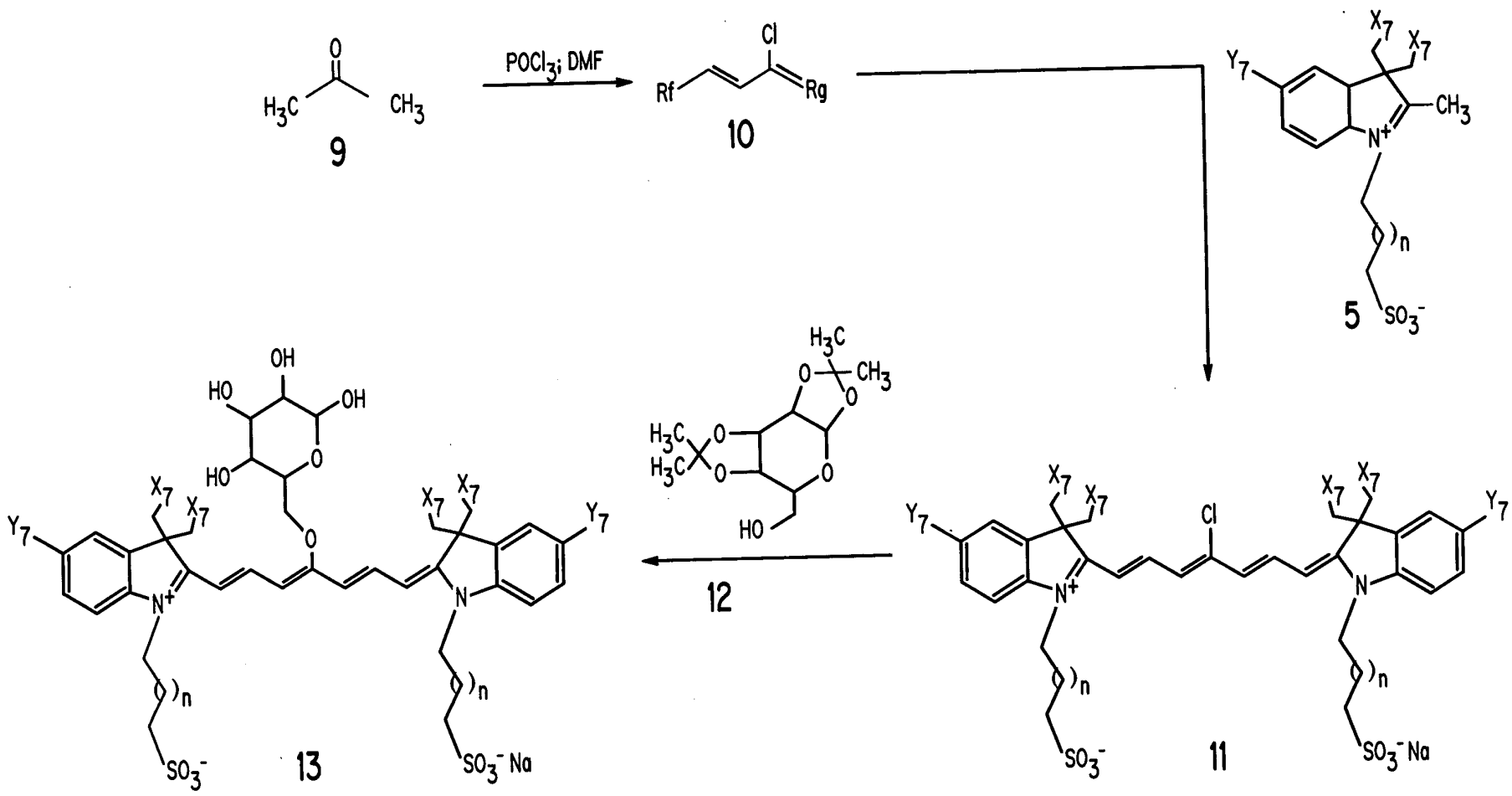


FIG. 3 :

n = 1-3; X_7 = H, OH; Y_7 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH; R_f = $(CH_3)_2N$ or OH; R_g = $(CH_3)_2N^+$ or CHO

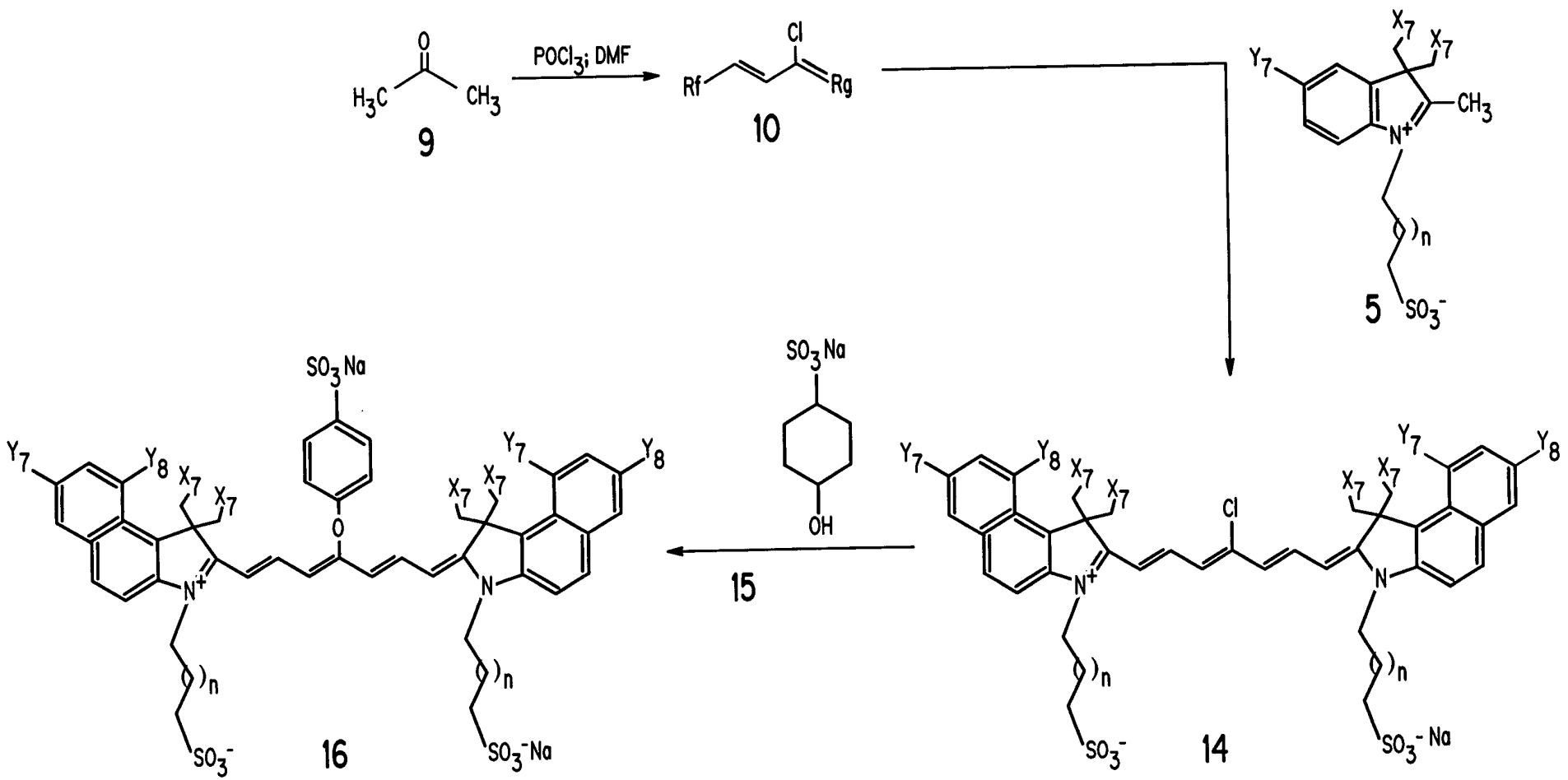


FIG. 4 :

n = 1-3; X_7 = H, OH; Y_7 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH; R_f = $(CH_3)_2N$ or OH; R_g = $(CH_3)_2N^+$ or CHO

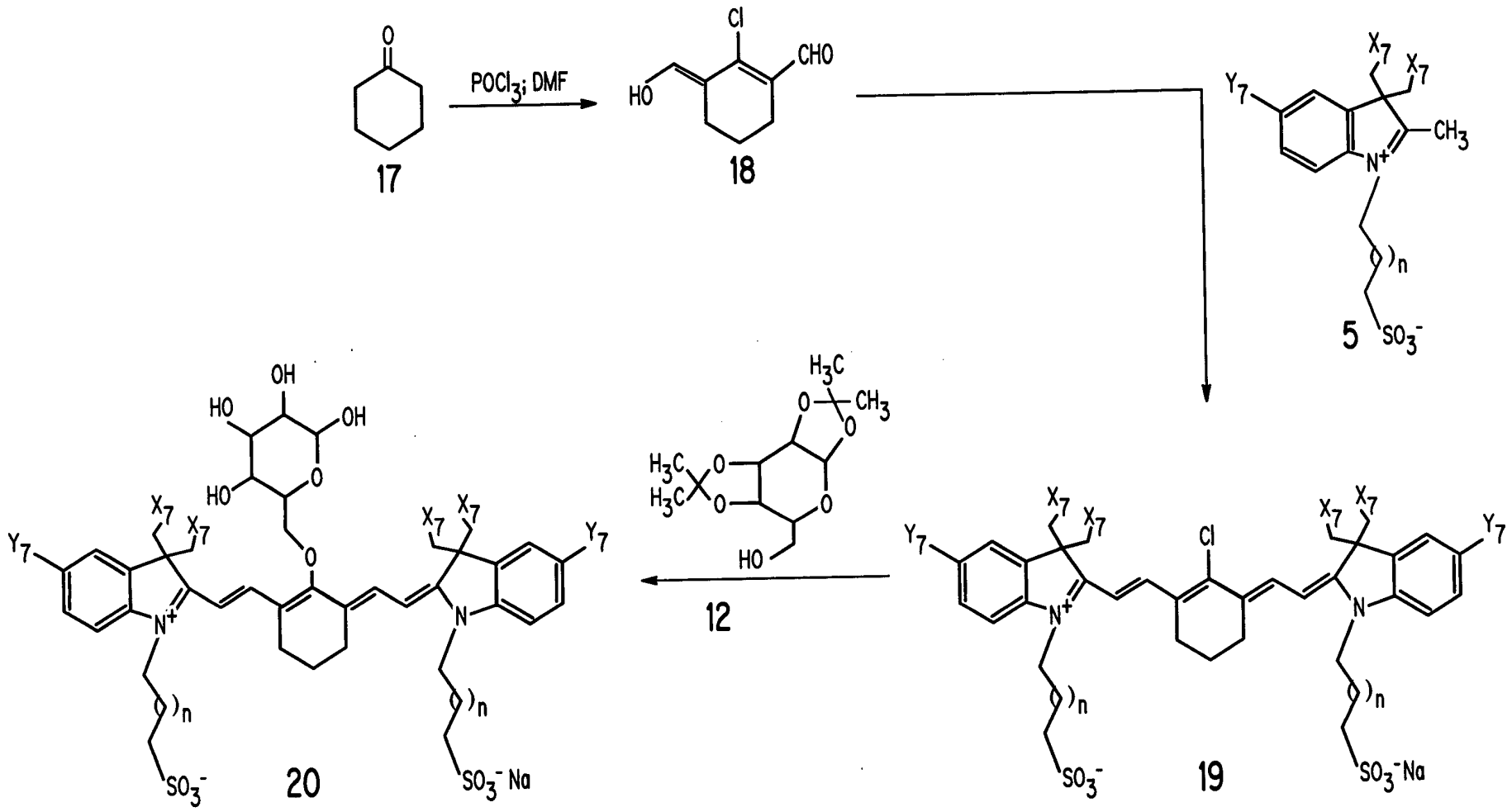


FIG. 5 :

n = 1-3; X_7 = H, OH; Y_7 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH

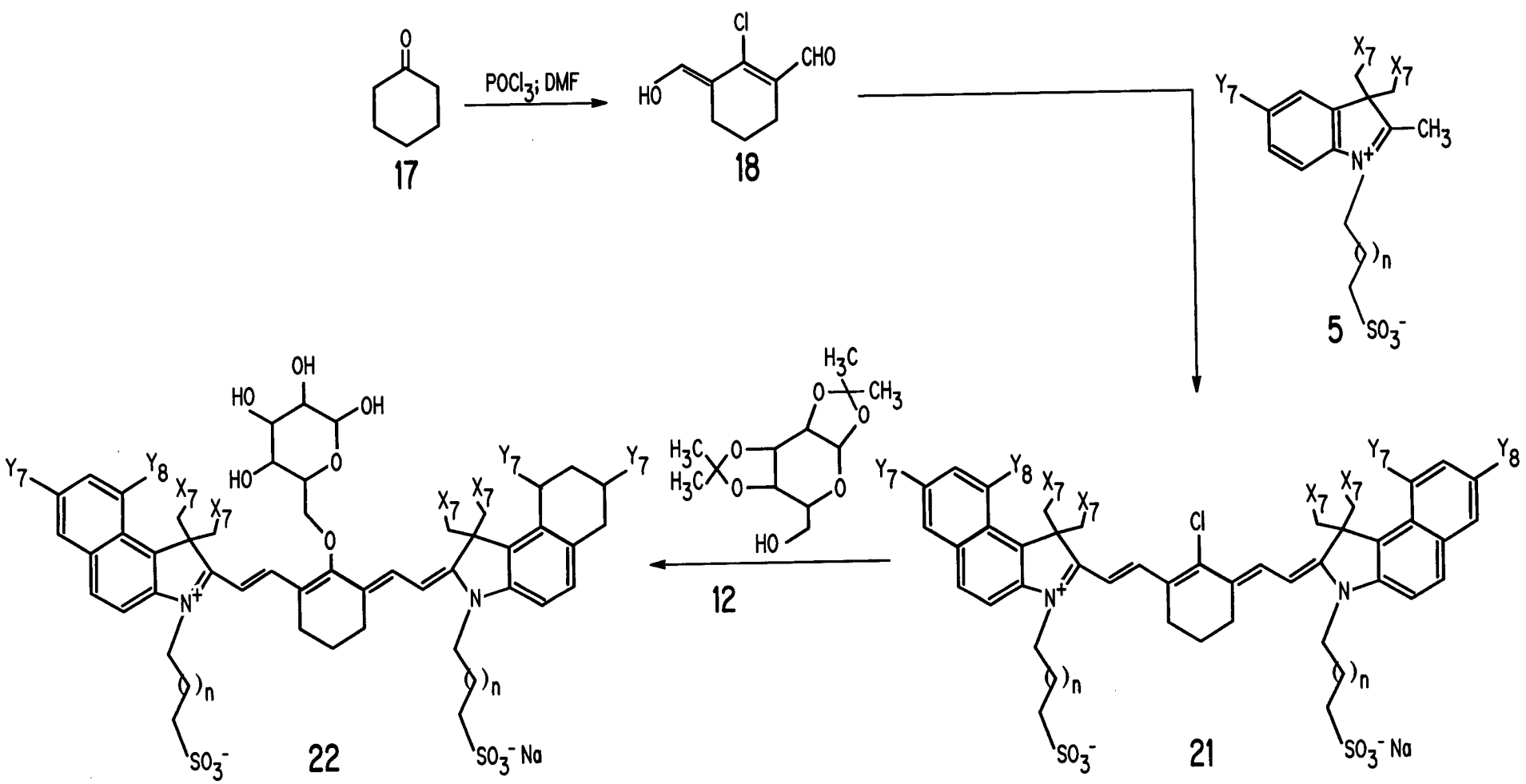


FIG. 6 :

n = 1-3; X_7 = H, OH; Y_7, Y_8 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH

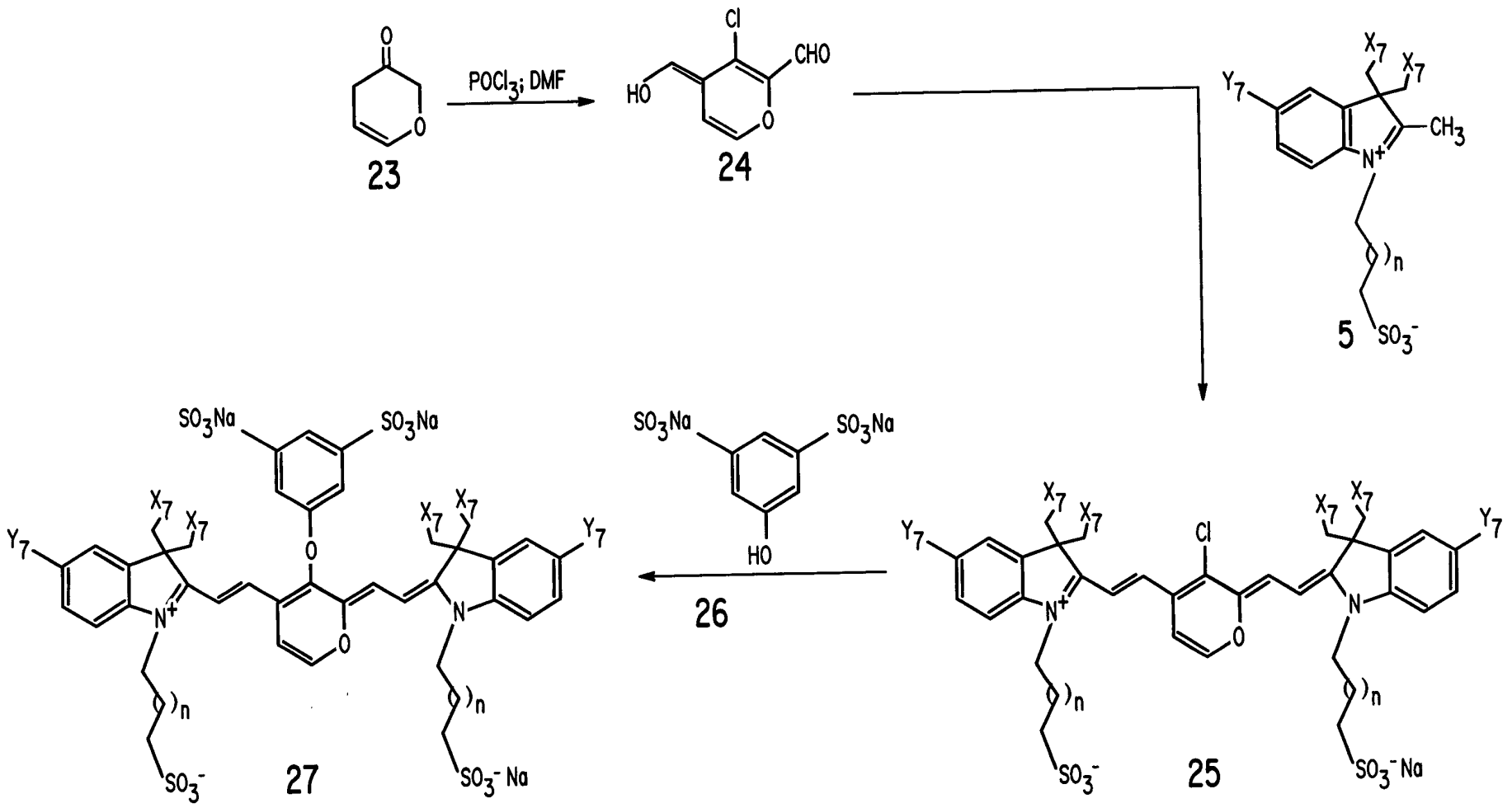


FIG. 7 :

n = 1-3; X_7 = H, OH; Y_7, Y_8 = H, SO_3^-, CO_2H, CH_2CO_2H, CH_2OH

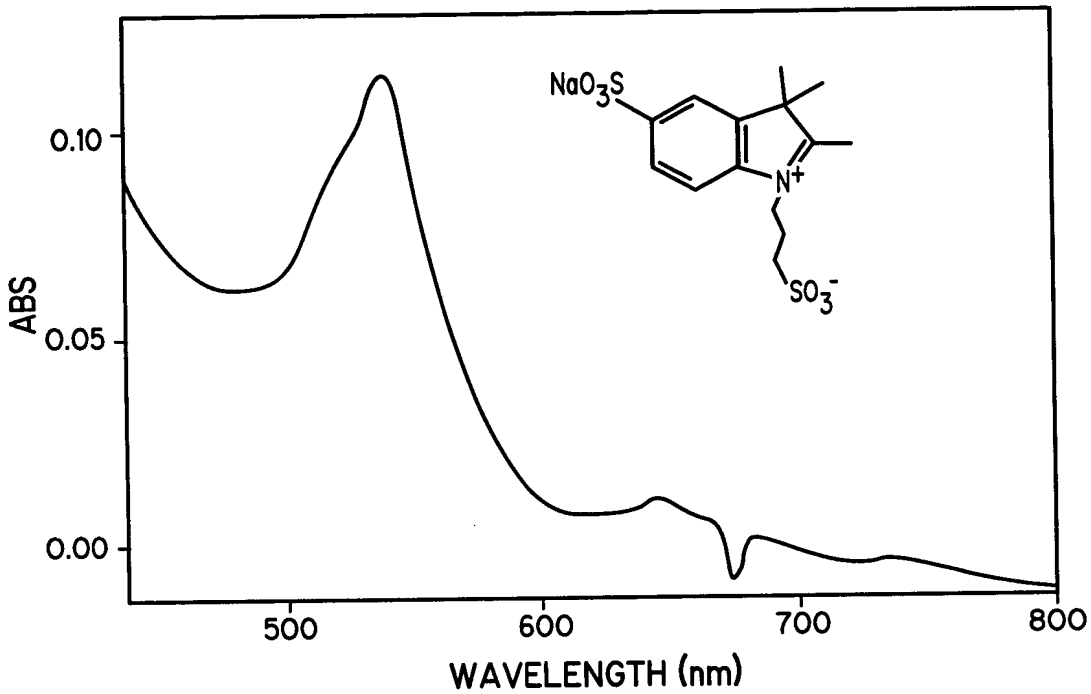

ABS
0.10
0.05
0.00
500
600
700
800
WAVELENGTH (nm)
NaO3S
N+
SO3-

FIG. 8A

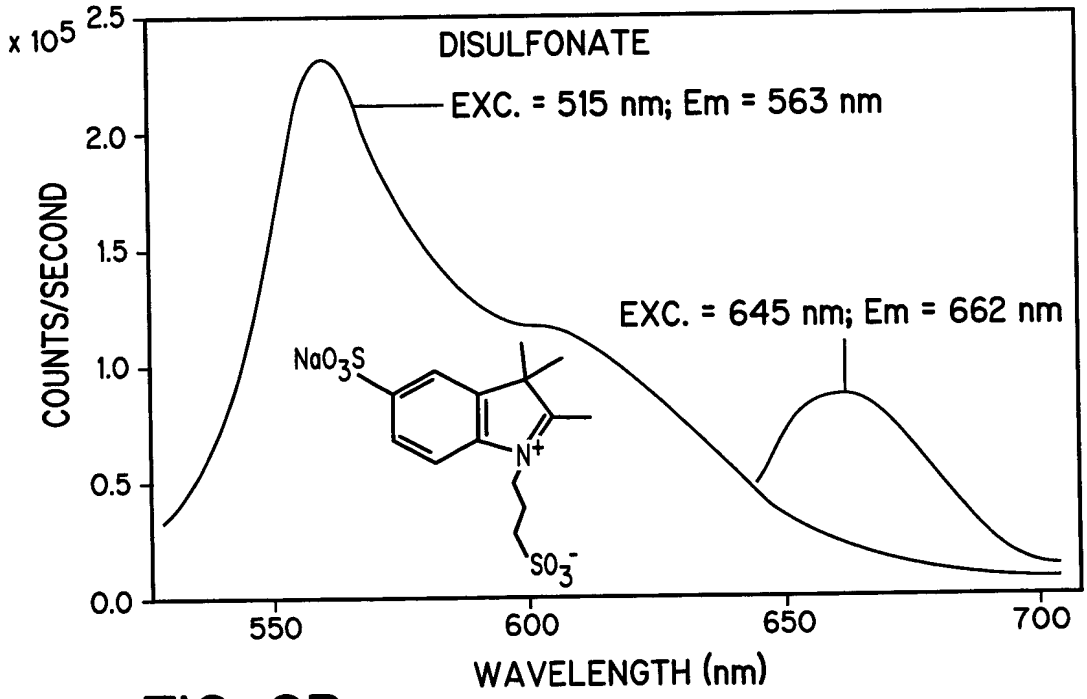

x 10^5
2.5
2.0
1.5
1.0
0.5
0.0
COUNTS/SECOND
DISULFONATE
EXC. = 515 nm; Em = 563 nm
EXC. = 645 nm; Em = 662 nm
NaO3S
N+
SO3-
550
600
650
700
WAVELENGTH (nm)

FIG. 8B

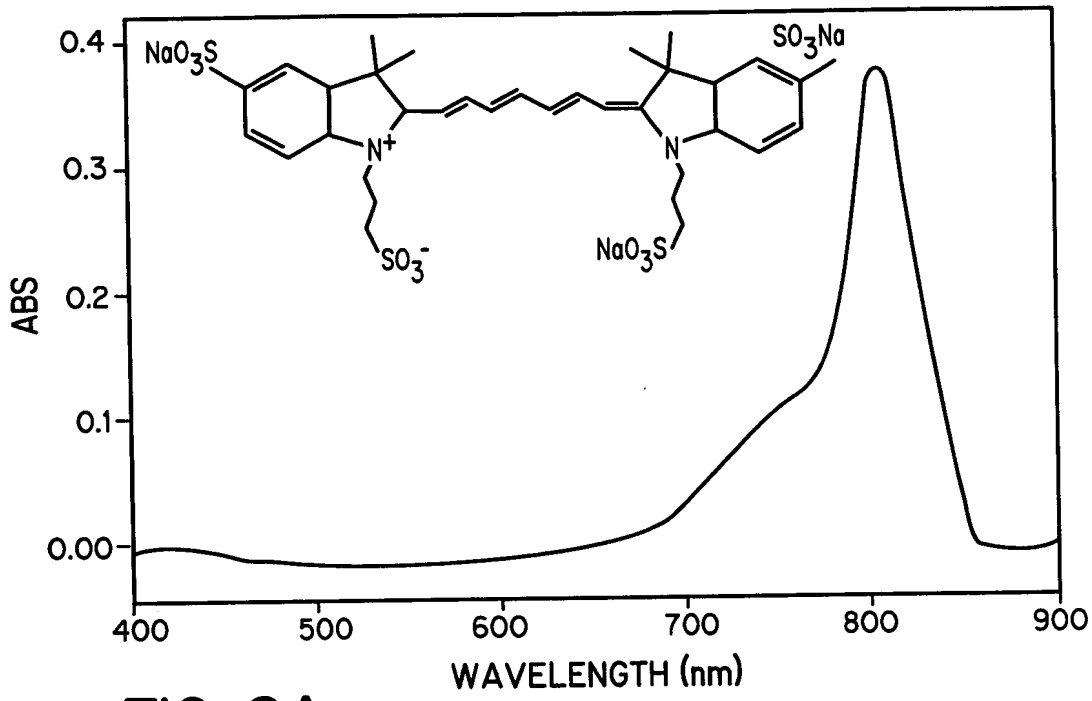

0.4
0.3
0.2
0.1
0.00
ABS
400
500
600
700
800
900
WAVELENGTH (nm)
NaO3S
SO3Na
N+
N
SO3-
NaO3S

FIG. 9A

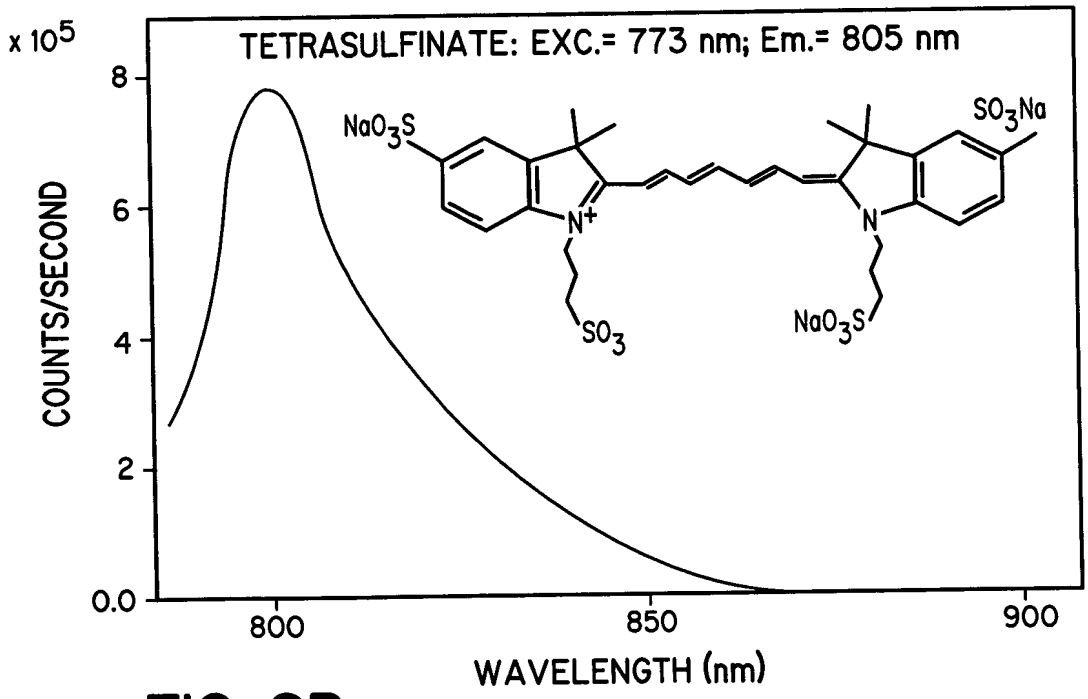

x 10^5
TETRASULFINATE: EXC.= 773 nm; Em.= 805 nm
8
6
4
2
0.0
COUNTS/SECOND
800
850
900
WAVELENGTH (nm)
NaO3S
SO3Na
N+
N
SO3
NaO3S

FIG. 9B

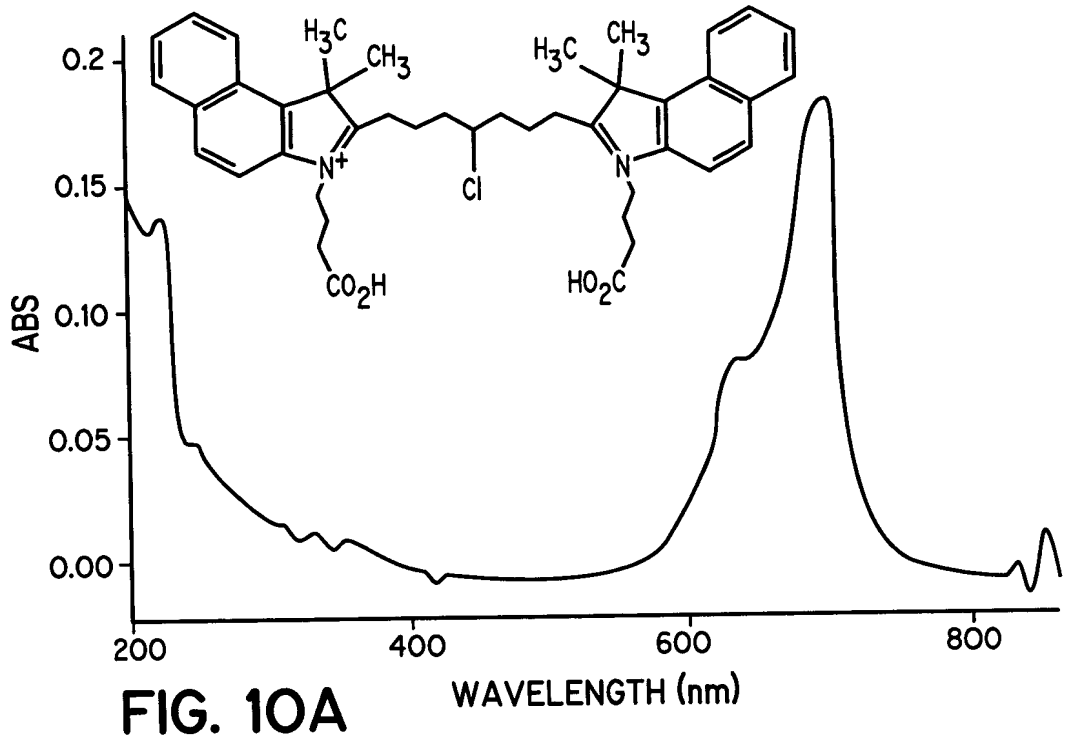


FIG. 10A

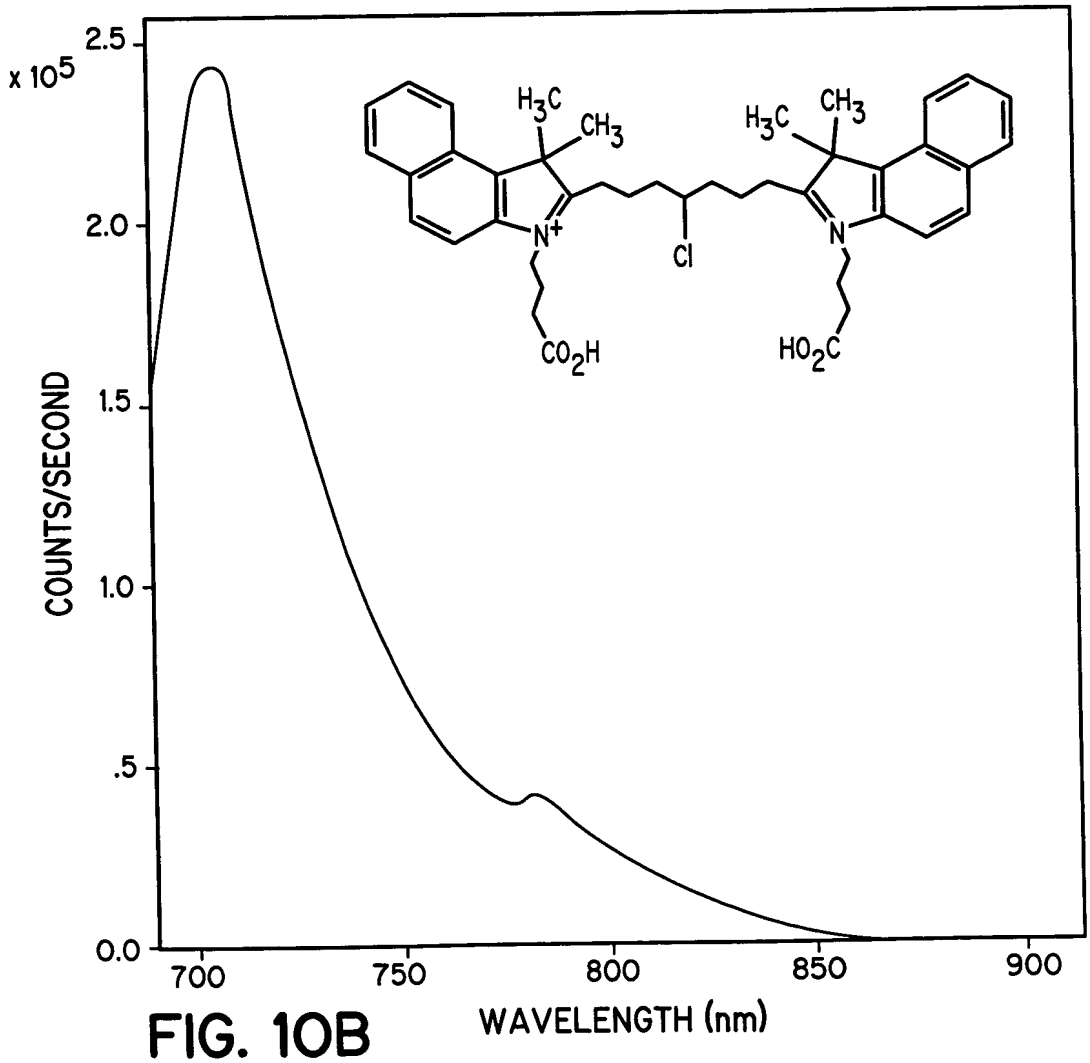


FIG. 10B

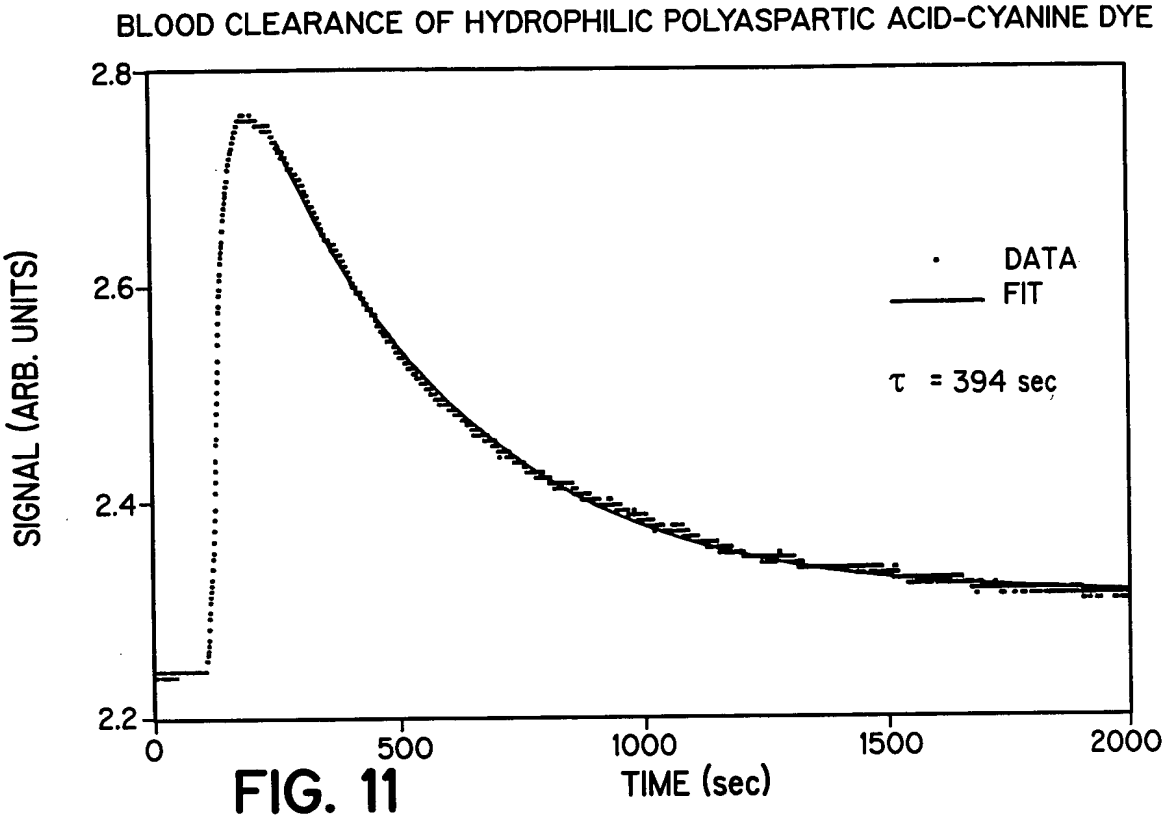

BLOOD CLEARANCE OF HYDROPHILIC POLYASPARTIC ACID-CYANINE DYE
SIGNAL (ARB. UNITS)
2.8
2.6
2.4
2.2
0
500
1000
1500
2000
TIME (sec)
DATA
FIT
τ = 394 sec

FIG. 11

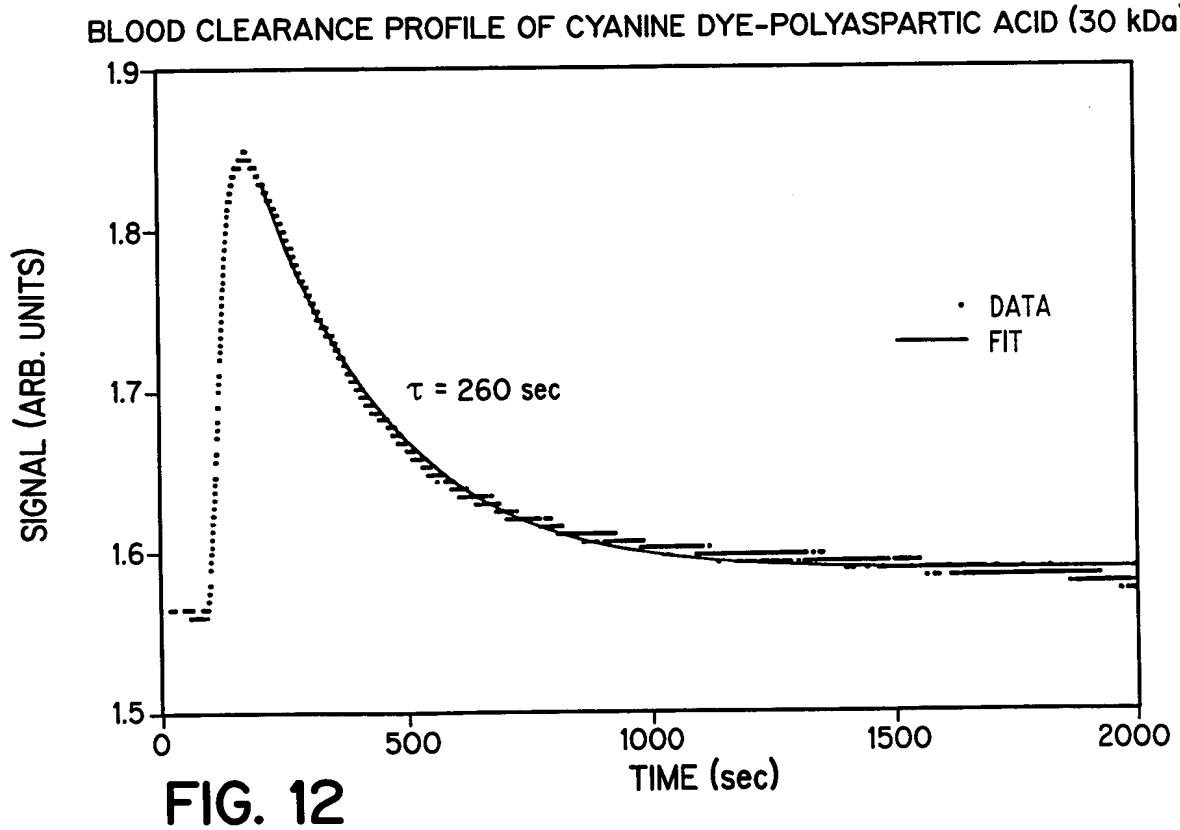

BLOOD CLEARANCE PROFILE OF CYANINE DYE-POLYASPARTIC ACID (30 kDa)
SIGNAL (ARB. UNITS)
1.9
1.8
1.7
1.6
1.5
0
500
1000
1500
2000
TIME (sec)
DATA
FIT
τ = 260 sec

FIG. 12

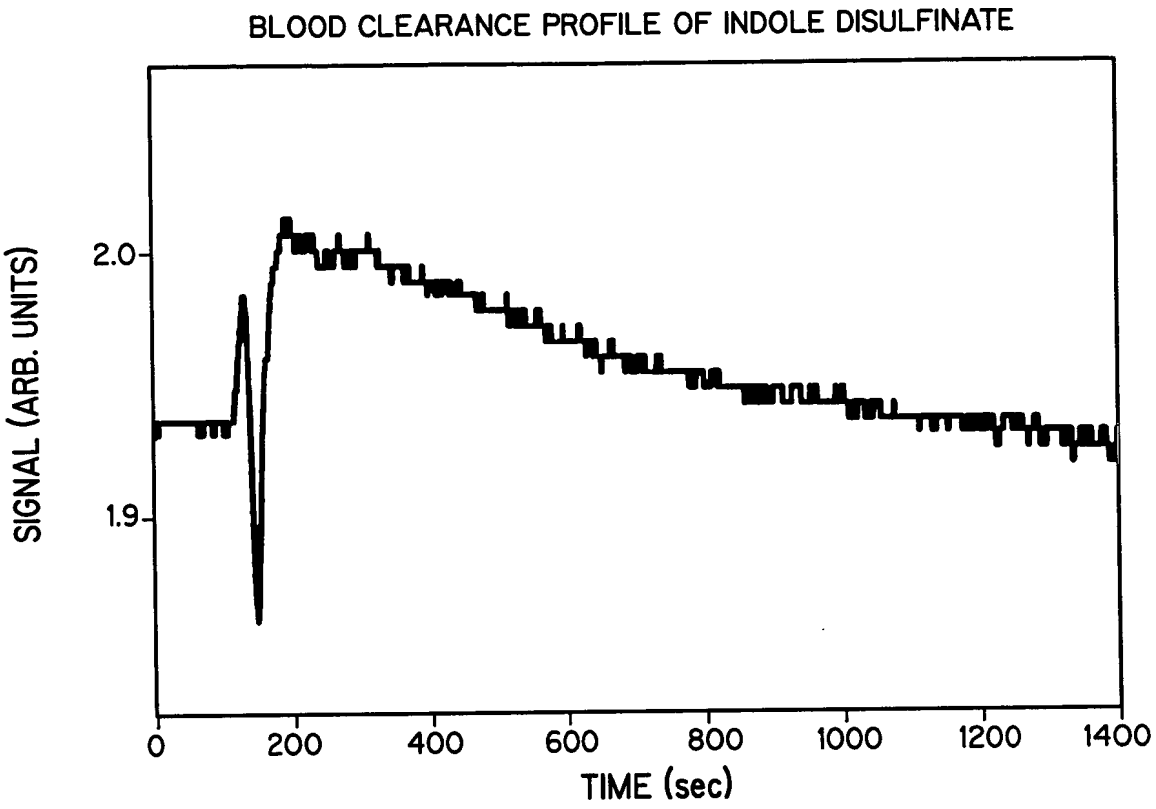

BLOOD CLEARANCE PROFILE OF INDOLE DISULFINATE
SIGNAL (ARB. UNITS)
2.0
1.9
0
200
400
600
800
1000
1200
1400
TIME (sec)

FIG. 13

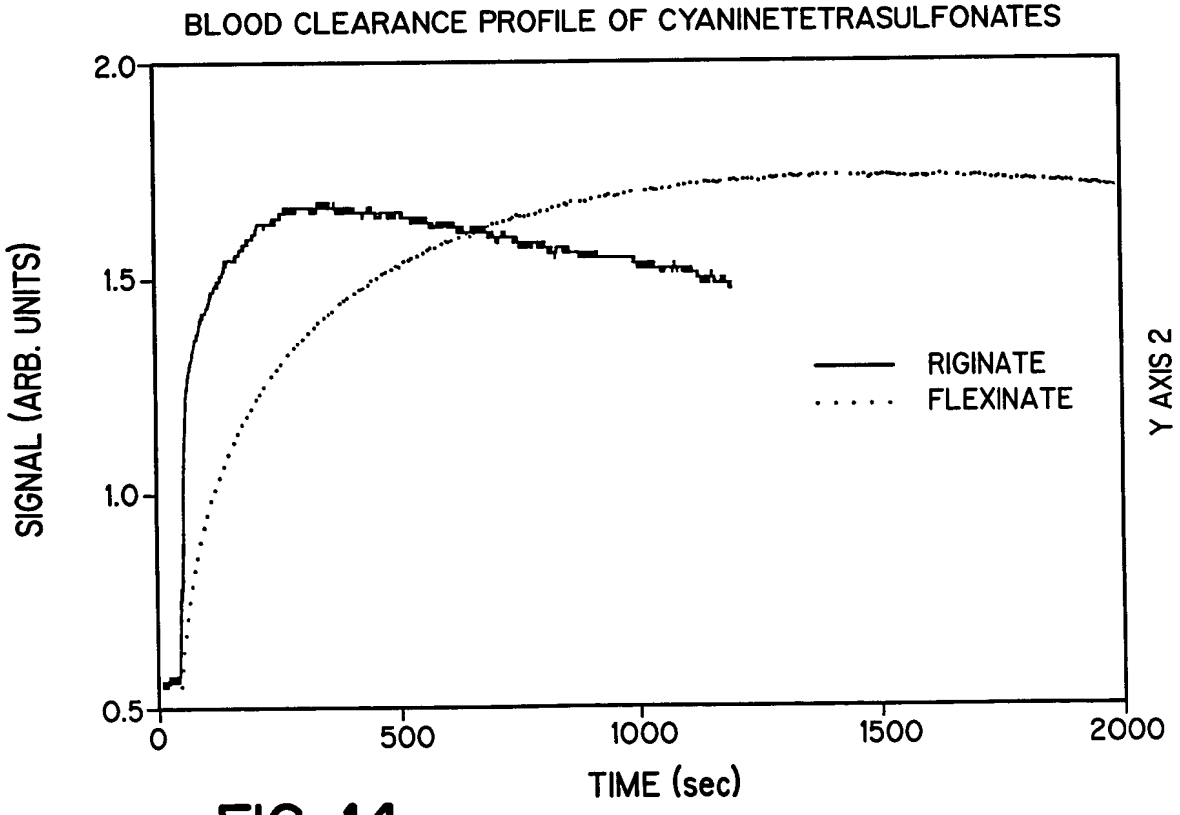

BLOOD CLEARANCE PROFILE OF CYANINETETRASULFONATES
SIGNAL (ARB. UNITS)
2.0
1.5
1.0
0.5
0
500
1000
1500
2000
TIME (sec)
RIGINATE
FLEXINATE
Y AXIS 2

FIG. 14